

DOOR OPERATOR

Abstract

A drive mechanism is provided for a door operator, comprising a drive member and a driven member. The drive member includes a protrusion, the edges of the protrusion forming first and second driving surfaces which define a free space of at least about 90° there between. The driven member includes a protrusion, the sides of the protrusion form a first and a second driven surface, respectively. The drive member is adapted to be operably connected to between a motor assembly for rotating the drive member and a door closer assembly rotating with the driven member. The drive member and the driven member are disposed for relative rotation in substantially the same plane such that the driven member protrusion moves in the free space defined by the driving surfaces of the drive member protrusion. Rotation of the drive member from a first angular orientation to a second angular orientation in a direction toward an adjacent driven surface causes rotation of the driven member for powered opening of the door from the closed position to the open position. The driven member protrusion moves in the free space without engaging the protru-

sion surfaces when the door is opened manually from the closed position and allowed to close.